EP18278-03587

CLAIMS

1. Method for transmitting video data from a server to a client, said data being arranged in data frames forming a data stream, each frame having assigned a priority level, the method comprising the steps of:

receiving (S420) at the server a client's retransmission request for a data frame;

comparing (S630, S730, S830) the priority level of the requested data frame with a priority threshold value (P_{th}); and

retransmitting (S450) the requested data frame if the priority level is greater than said priority threshold value.

- 2. The method according to claim 1, further comprising the step of comparing the priority level of any data frame to be transmitted with said priority threshold value.
- 3. The method according to claim 1 or 2, wherein the retransmission request includes the reception times and frame lengths of at least two preceding data frames.
- 4. Method for receiving video data from a server, said data being arranged in data frames forming a data stream, each frame having assigned a priority level, the method comprising the steps of:

detecting (S920) that a data frame is missing;

comparing (S630, S730, S830) the priority level of the missing data frame with a priority threshold value (P_{th}); and

sending (S940) a retransmission request for the missing data frame to the server.

- 5. The method according to one of claims 1 to 4, wherein the frames having assigned a priority level include P-frames.
- 6. The method according to one of claims 1 to 5, wherein the assignment of priority levels to frames is performed according to the logical depth of the multidependency of the respective frame.
- 7. The method according to one of claims 1 to 6, wherein the step of comparing includes the steps of measuring (S710) the available channel bandwidth (B_{ch}) and calculating (S720, S820) said priority threshold value based on the measured bandwidth.
- 8. The method according to claim 7, wherein the step of comparing further includes the step of measuring (S810) the bit rate (B_s) of previously sent frames, wherein said priority threshold value is calculated based on the measured bandwidth and the measured bit rate.
- 9. The method according to one of claims 1 to 8, further comprising the step of estimating the data frame arrival time and comparing the estimated arrival time with the desired arrival time for suppressing transmission if the estimated arrival time is not before the desired arrival time.
- 10. Apparatus for transmitting video data to a client, said data being arranged in data frames forming a data stream, each frame having assigned a priority level, the apparatus comprising:

receiver means (230) for receiving a retransmission request from the client for a data frame;

a controller (210) for comparing the priority level of the requested data frame with a priority threshold value; and

transmitter means (130, 220) for retransmitting the requested data frame if the priority level is greater than said priority threshold value.

11. Apparatus for receiving video data from a server, said data being arranged in data frames forming a data stream, each frame having assigned a priority level, the apparatus comprising:

detection means (240) for detecting that a data frame is missing;

a controller for comparing the priority level of the missing data frame with a priority threshold value; and

transmitter means (250) for sending a retransmission request for the missing data frame to the server.

12. The apparatus according to claim 10 or 11, arranged for performing the method according to one of claims 1 to 9.